

FIG. 1
PRIOR ART

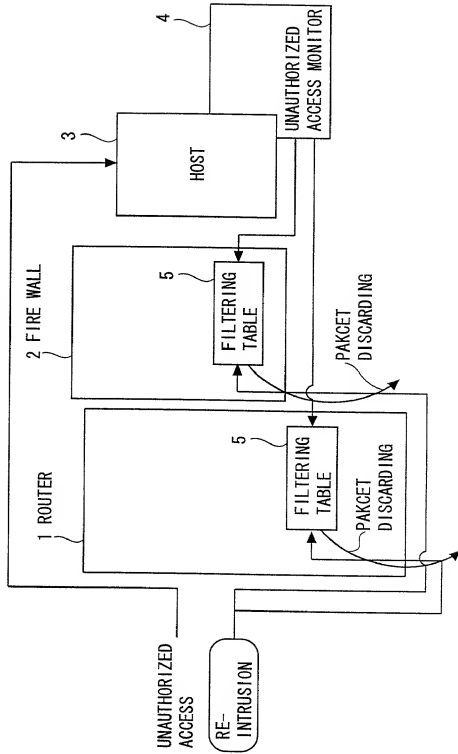


FIG. 2

PRIOR ART

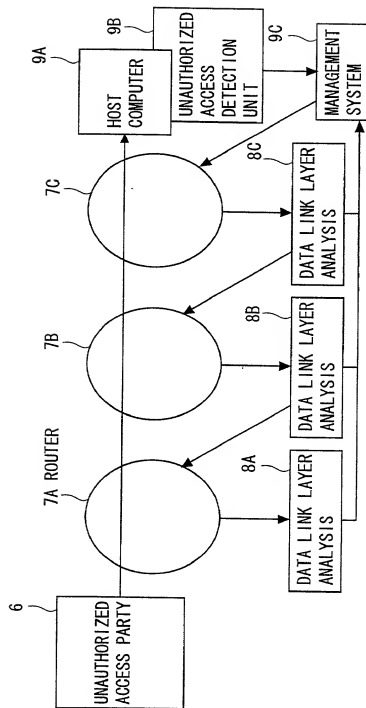


FIG. 3

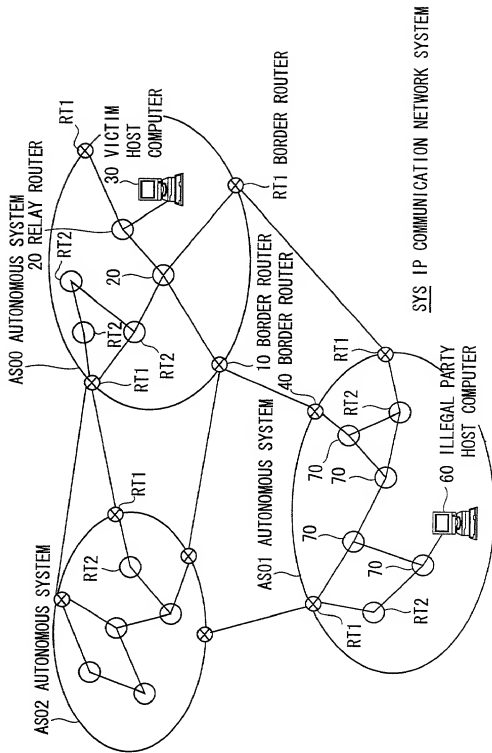


FIG. 4

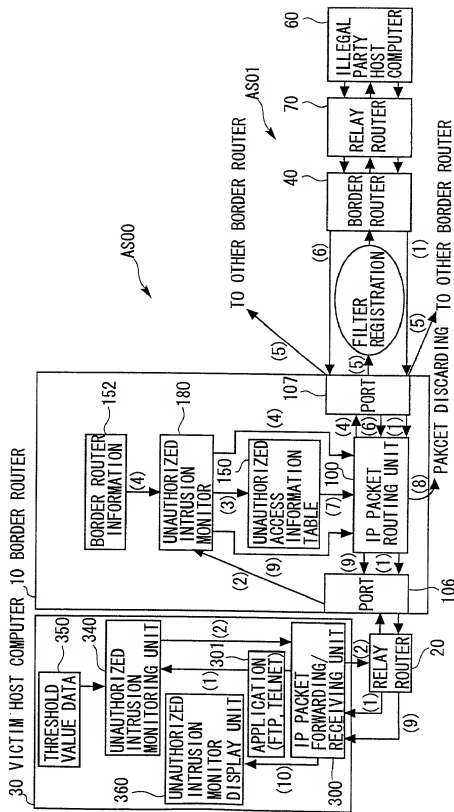


FIG. 5

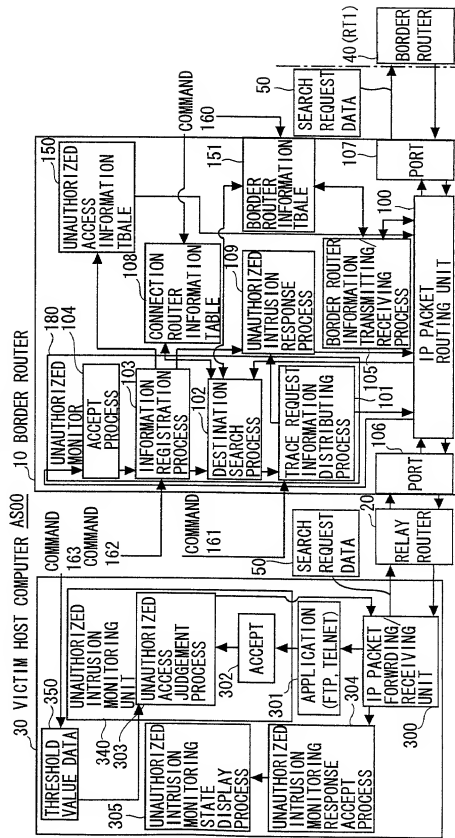


FIG. 6

50

SEARCH REQUEST DATA	
REQUEST TYPE	(REGISTRATION/CANCELLATION)
DESTINATION ROUTER IP ADDRESS	
SELF-ROUTER IP ADDRESS	
DESTINATION IP ADDRESS	
PROTOCOL TYPE	
PORT NUMBER	

FIG. 7

80

UNAUTHORIZED ACCESS INFORMATION	
MONITORING PERIOD (TIME)	
DESTINATION IP ADDRESS	
PROTOCOL TYPE	
PORT NUMBER	

FIG. 8

350

THRESHOLD VALUE DATA

ICMP 50 TIMES/SEC (1)
TELNET 3 TIMES/SEC (1)
FTP 3 TIMES/SEC (1)
ICMP 80 TIMES/SEC (2)
FTP 3 TIMES/SEC (2)
⋮

FIG. 9

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BORDER ROUTER INFORMATION	
BORDER ROUTER IP ADDRESS #1	
BORDER ROUTER IP ADDRESS #2	
BORDER ROUTER IP ADDRESS #3	
BORDER ROUTER IP ADDRESS #4	

FIG. 10

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CONNECTION ROUTER INFORMATION

SELF-ROUTER INFORMATION	CONNECTION ROUTER INFORMATION
MAC ADDRESS #1	CONNECTION ROUTER IP ADDRESS #1
VPI/VC1#1	CONNECTION ROUTER IP ADDRESS #2
INPUT PORT INFORMATION #1	CONNECTION ROUTER IP ADDRESS #3
⋮	⋮
⋮	⋮
⋮	⋮
⋮	⋮

FIG. 11

120

UNAUTHORIZED PACKET INFORMATION

DESTINATION IP ADDRESS

PROTOCOL TYPE

PORT NUMBER

IP HEADER

MAC ADDRESS OR VPI/VCI OR
INPUT PORT INFORMATION

FIG. 12

140 UNAUTHORIZED INTRUSION RESPONSE DATA

DESTINATION IP ADDRESS
SELF-ROUTER IP ADDRESS
PROTOCOL TYPE
PORT NUMBER
SELF-ROUTER AS NUMBER
RESPONSE TYPE (DISCOVERING OF UNAUTHORIZED ACCESS/MONITORING OF UNAUTHORIZED ACCESS)

FIG. 13

JUDGEMENT TYPE OF
THRESHOLD VALUE DATA

ICMP 50 TIMES/SEC (1)
TELNET 3 TIMES/SEC (1)
FTP 3 TIMES/SEC (1)
ICMP 80 TIMES/SEC (2)
FTP 3 TIMES/SEC (2)
⋮
⋮
⋮

ELEMENTS PER JUDGEMENT TYPE

ICMP 50 TIMES/SEC (1): JUDGED TO BE UNAUTHORIZED ACCESS WHEN ALL THE FOLLOWING CONDITIONS ARE COINCIDENT WITH AND CONDITIONS	
UNAUTHORIZED ACCESS TRY COUNT	50 TIMES/SEC
APPLICATION IDENTIFIER	NO IDENTIFIER
MESSAGE TYPE	ICMP ECHO
SAME USER JUDGEMENT	NEGATED
SAME SESSION JUDGEMENT	NEGATED
INPUT COMMAND	NO COMMAND
ALARM FUNCTION	ALARMED
MONITORING START TIME	ALL
MONITORING END TIME	ALL
⋮	⋮
⋮	⋮
TELNET 3 TIMES/SEC (1): JUDGED TO BE UNAUTHORIZED ACCESS WHEN ALL THE FOLLOWING CONDITIONS ARE COINCIDENT WITH AND CONDITIONS	
UNAUTHORIZED ACCESS TRY COUNT	3 TIMES/SEC
APPLICATION IDENTIFIER	TELNET
MESSAGE TYPE	NOTHING
SAME SESSION JUDGEMENT	JUDGED
SAME USER JUDGEMENT	JUDGED
INPUT COMMAND	PING
ALARM FUNCTION	ALARMED
MONITORING START TIME	01:00
MONITORING END TIME	06:00
⋮	⋮
⋮	⋮

360 UNAUTHORIZED INTRUSION MONITOR DISPLAY UNIT

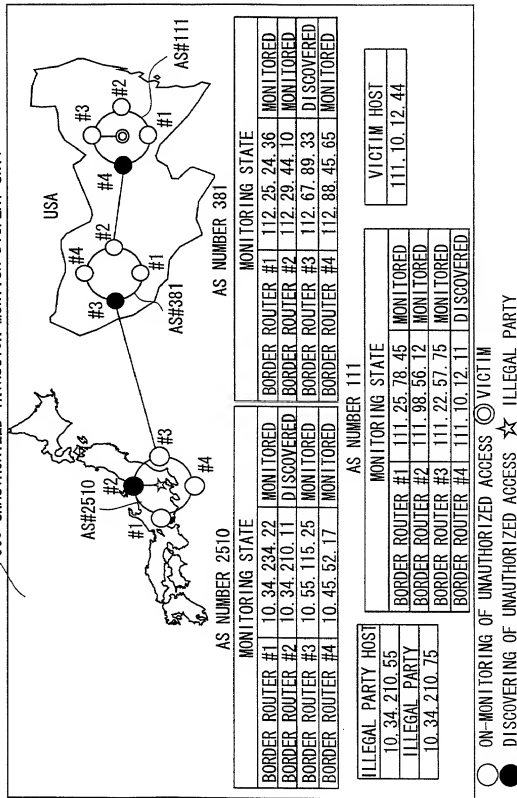
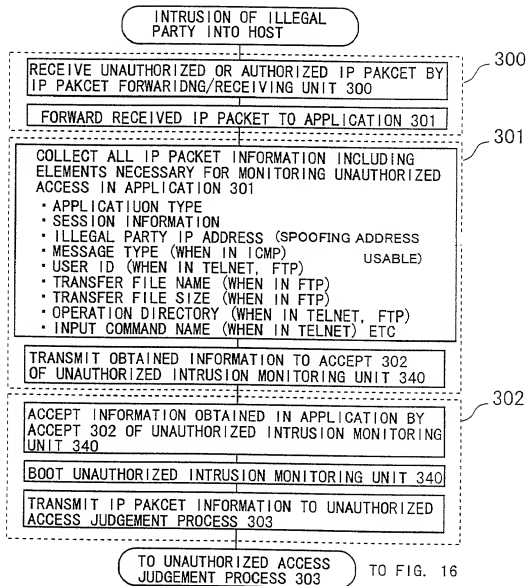


FIG. 15



TO FIG. 16

FIG. 16

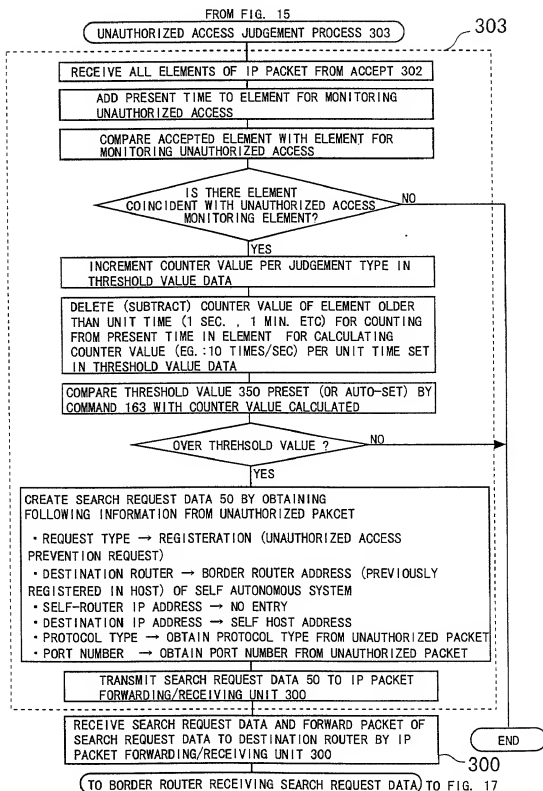


FIG. 17

FROM FIG. 16

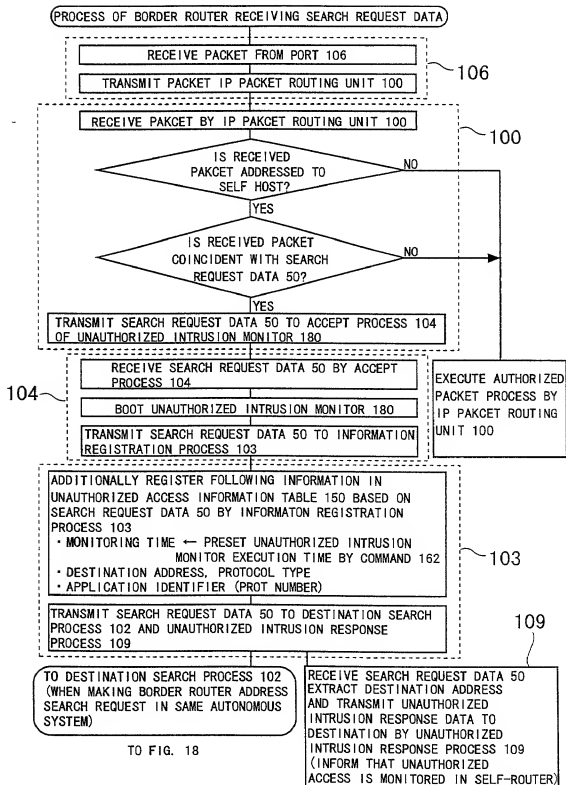
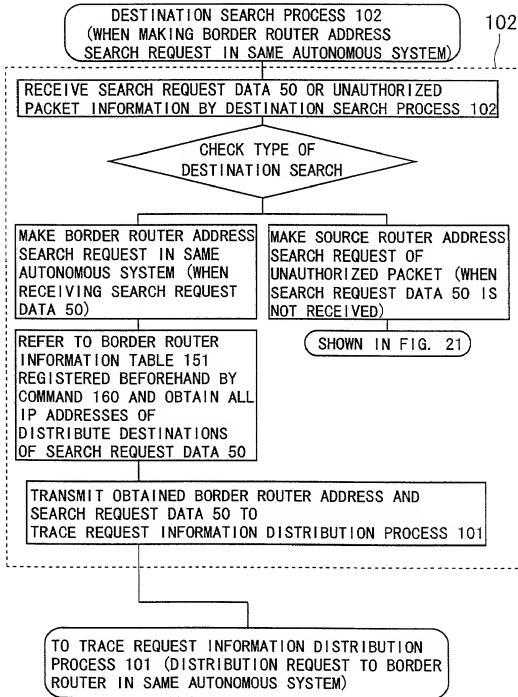


FIG. 18

FROM FIG. 17



TO FIG. 19

FIG. 19

FROM FIG. 18

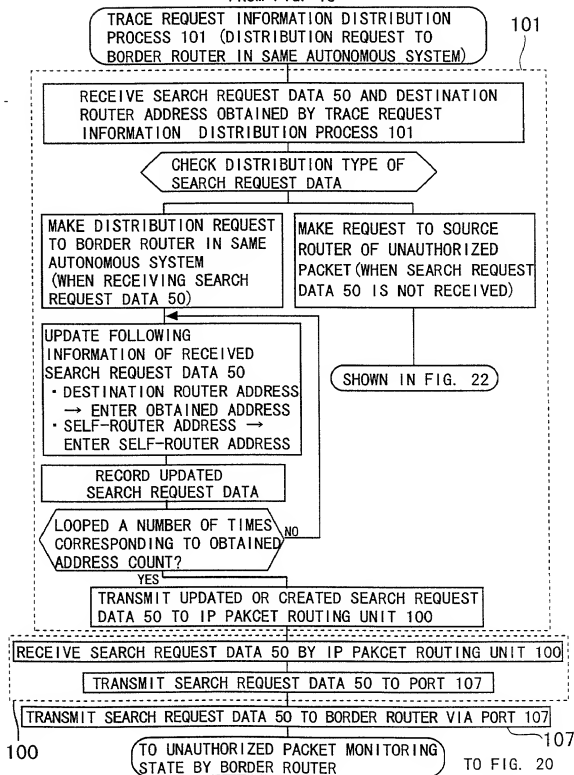
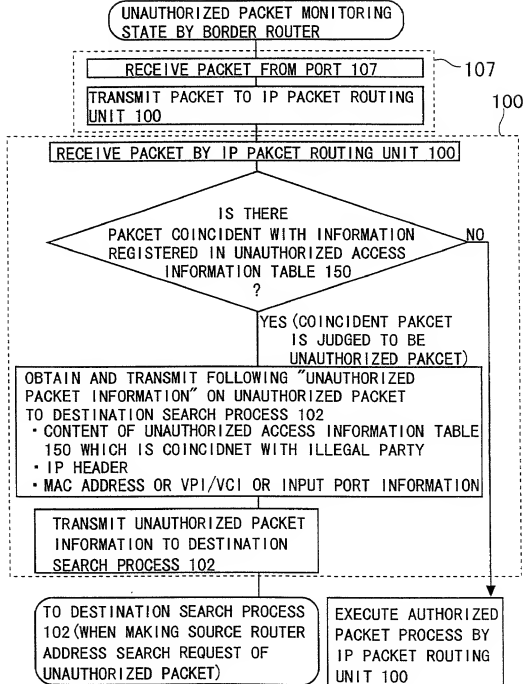


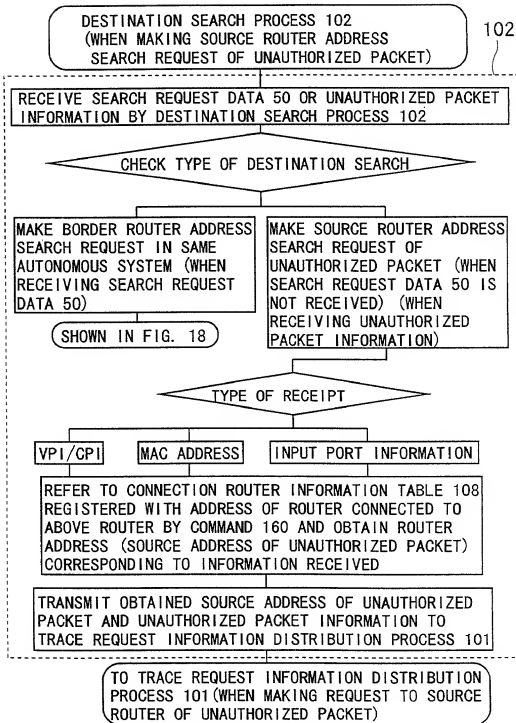
FIG. 20

FROM FIG. 19



TO FIG. 21

FIG. 21
FROM FIG. 20



TO FIG. 22

FIG. 22

FROM FIG. 21

